

# Emergency Department Syndromic Surveillance System Bulletin (England) 2023 Week 7

## Key messages

Data reported to: 19 February 2023

During week 7, ED attendances for acute respiratory infections and influenza-like illness remained stable overall and similar to seasonally expected levels. There were, however, further increases in 'COVID-19-like' ED attendances, particularly in adults aged 65+ years. There were also further increases in gastroenteritis attendances, but they remain below seasonally expected levels. ED attendances for scarlet decreased slightly during week 7.

**Please note:** Remodelled EDSSS baselines were refitted during week 6 to account for post-COVID-19 changes in health care seeking behaviour.

## Syndromic indicators at a glance

Table 1: The current trend (based on previous weeks, not only the current week) and the level (compared to the expected baseline), of each indicator included in this bulletin.

Indicator	Trend <sup>1</sup>	Level
Total attendances (Figure 1)	No trend	No baseline
COVID-19-like (Figure 2)	Increasing	No baseline
Acute respiratory infections (Figure 3)	No trend	Similar to baseline
Acute bronchiolitis or bronchitis (Figure 4)	No trend	Similar to baseline
Influenza-like illness (Figure 5)	No trend	Similar to baseline
Pneumonia (Figure 6)	Increasing	Above baseline
Asthma (Figure 7)	Decreasing	Similar to baseline
Gastroenteritis (Figure 8)	Increasing	Below baseline
Cardiac (Figure 9)	No trend	Similar to baseline
Myocardial ischaemia (Figure 10)	No trend	Similar to baseline
Acute alcohol intoxication (Figure 11)	Decreasing	Similar to baseline
Mental health (Figure 12)	Decreasing	No baseline
Scarlet fever (Figure 13)	Decreasing	No baseline
Impact of cold (Figure 14)	No trend	Similar to baseline

<sup>&</sup>lt;sup>1</sup> trend reports on the trend seen over most recent and earlier weeks

## **Contents**

Key messages	2
Syndromic indicators at a glance	2
Contents	3
About this syndromic surveillance system	4
Total attendances	5
Respiratory conditions	7
COVID-19-like	7
Acute respiratory infections	9
Acute bronchiolitis/bronchitis	11
Influenza-like illness	13
Pneumonia	15
Asthma	17
Gastrointestinal conditions	19
Gastroenteritis	19
Cardiac conditions	21
Cardiac	21
Myocardial ischaemia	23
Other conditions	25
Acute alcohol intoxication	25
Mental health	27
Scarlet fever	29
Seasonal environmental conditions	31
Impact of cold	32
Notes and caveats	34
Acknowledgements	35
About the UK Health Security Agency	36

## About this syndromic surveillance system

This bulletin presents data from the UK Health Security Agency (UKHSA) emergency department syndromic surveillance system.

Syndromic surveillance can be used to:

- assess current trends
- assess current trends and levels compared to historical baselines
- compare trends between age groups/areas

Syndromic surveillance should not be used to:

- estimate total burden or number of 'cases' of a condition (see Notes and caveats
- compare levels between age groups/areas

Fully anonymised, daily ED data are analysed and reported here, to identify and describe trends for a variety of syndromic indicators:

- syndromic indicators include groupings such as acute respiratory tract infections, gastroenteritis and myocardial ischaemia
- syndromic indicators are based on:
  - o the primary diagnosis for each attendance
  - o other diagnoses may be recorded, but are not used for indicator grouping
  - o diagnoses are based on signs/symptoms (not laboratory confirmed)
- Key messages describes any notable trends nationally (England), by age group and/or by geographical area (based on UKHSA Regions)
- the full list of syndromic indicators reported here, along with their current level and trend, are summarised in Table 1
- charts are provided for each syndromic indicator, on a national basis, by age group and by geographical area (UKHSA Region). Each chart includes a year of data with:
  - 7-day moving averages (adjusted for weekends and bank holidays) to aid in the identification of trend
  - statistical baselines (where available) to aid in the assessment of level compared to historical expectations

For further information please see Notes and caveats

Previous weekly bulletins from this system are available here.

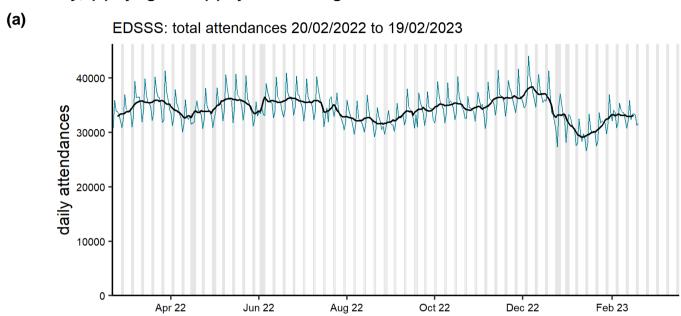
#### Data quality issues of note this week

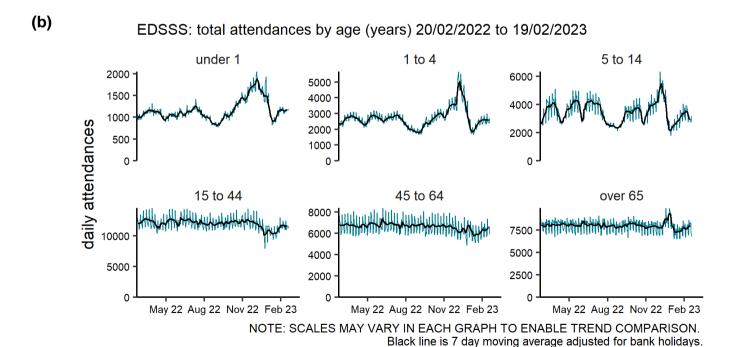
No issues identified. See Table 2 and Table 3 for the numbers of EDs included this week.

Remodelled EDSSS baselines have been refitted to surveillance data during week 6 to account for post-COVID-19 changes in health care seeking behaviour.

## **Total attendances**

Figure 1: Daily number of ED attendances (and 7-day moving average adjusted for bank holidays) recorded in this sentinel syndromic surveillance system in England (a) nationally, (b) by age and (c) by UKHSA Region.





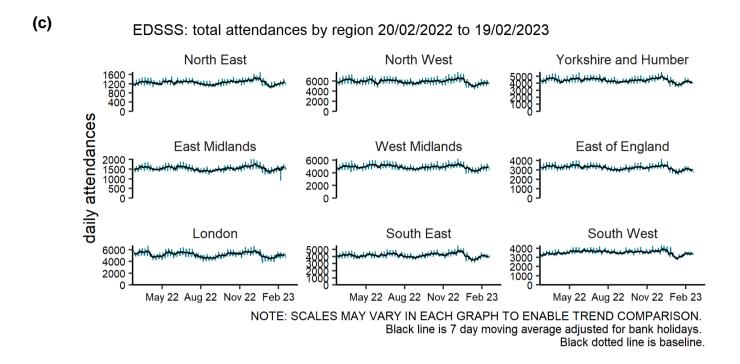


Table 2: The number of emergency department (ED) attendances and number with a diagnosis code included in surveillance each day during the most recent week.

Date	Total attendances <sup>2</sup>	Diagnoses included <sup>2</sup>
06 February 2023	35,910	22,126
07 February 2023	32,380	20,227
08 February 2023	33,331	20,024
09 February 2023	33,462	20,533
10 February 2023	33,233	20,048
11 February 2023	31,366	19,030
12 February 2023	32,127	19,581

Table 3: The number of EDs in total and in each UKHSA Region included in surveillance each day during the most recent week.

UKHSA Region	Number of EDs <sup>2</sup>
North East	4
North West	28
Yorkshire and Humber	18
West Midlands	19
East Midlands	5
East of England	13
London	19
South West	18
South East	16
Total	140

<sup>&</sup>lt;sup>2</sup> only attendances from Type 01 EDs meeting the weekly reporting criteria are included in this report, see Notes and caveats

for further details

## **Respiratory conditions**

Apr 22

Jun 22

#### COVID-19-like

Figure 2: Daily number of COVID-19-like ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

EDSSS: covid-19-like 20/02/2022 to 19/02/2023

Aug 22

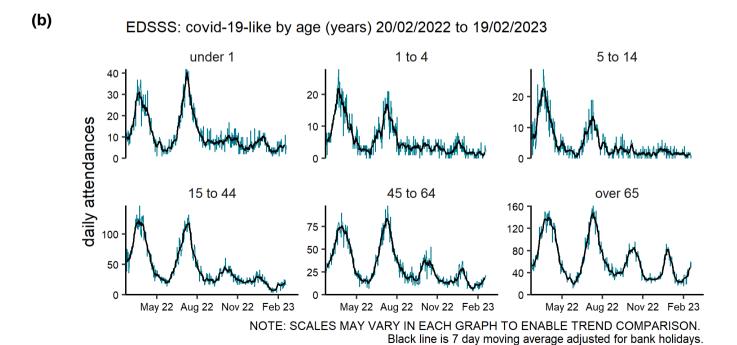
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

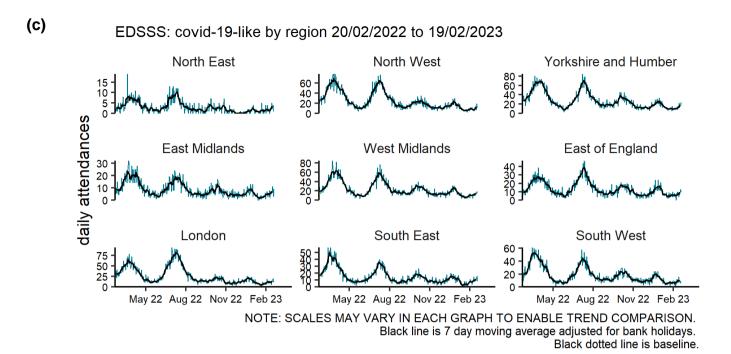
Dec 22

Feb 23

Apr 2

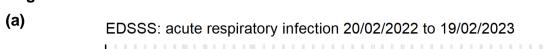
Oct 22

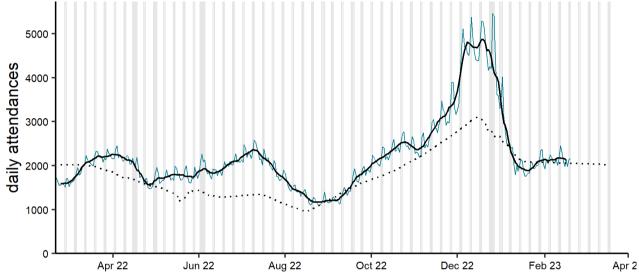


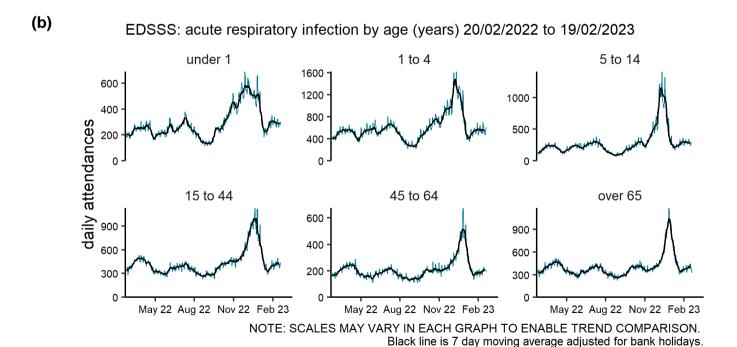


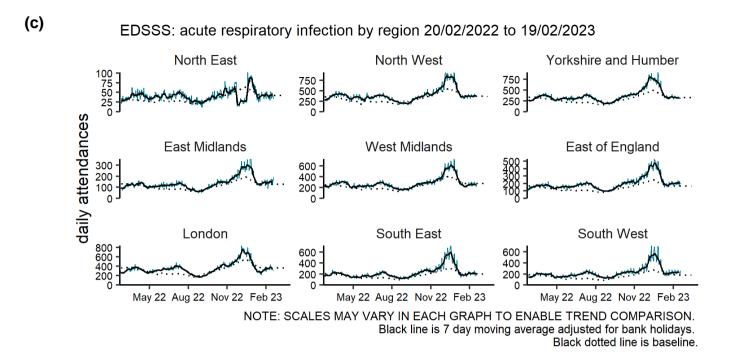
## Acute respiratory infections

Figure 3: Daily number of acute respiratory infection ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



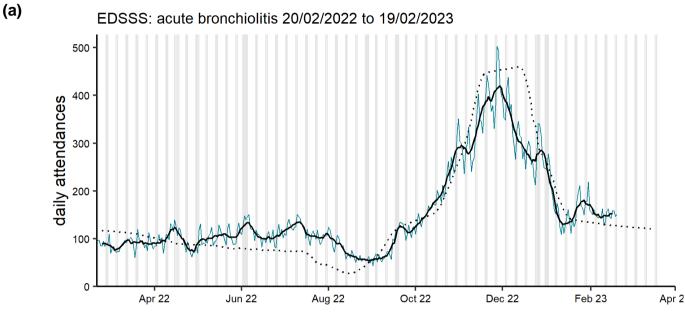


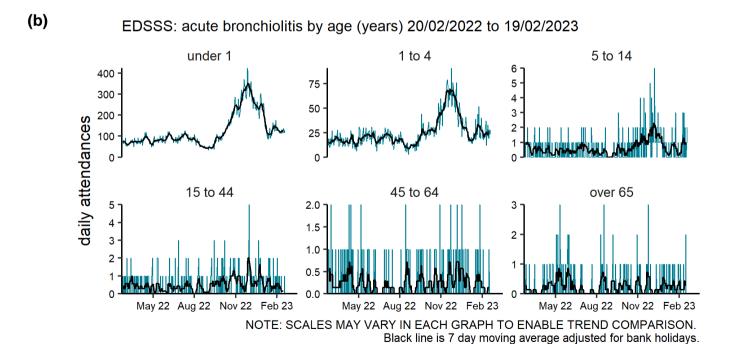


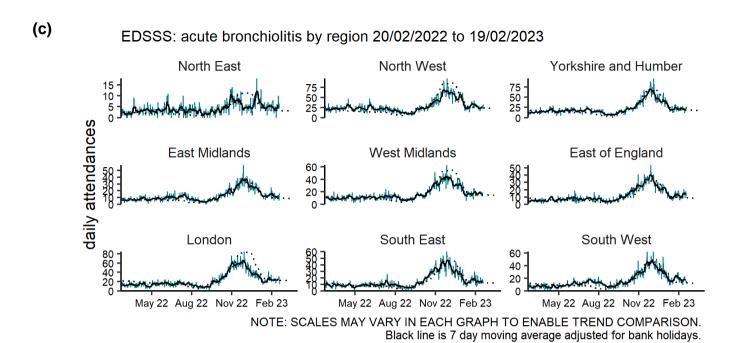


## Acute bronchiolitis/bronchitis

Figure 4: Daily number of acute bronchiolitis/bronchitis ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.





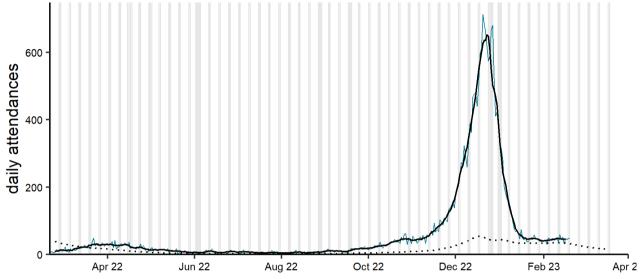


Black dotted line is baseline.

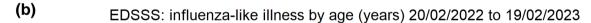
## Influenza-like illness

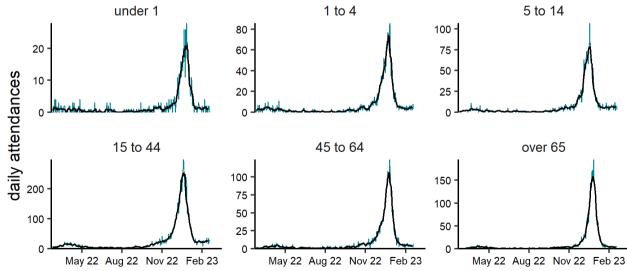
Figure 5: Daily number of influenza-like illness ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.





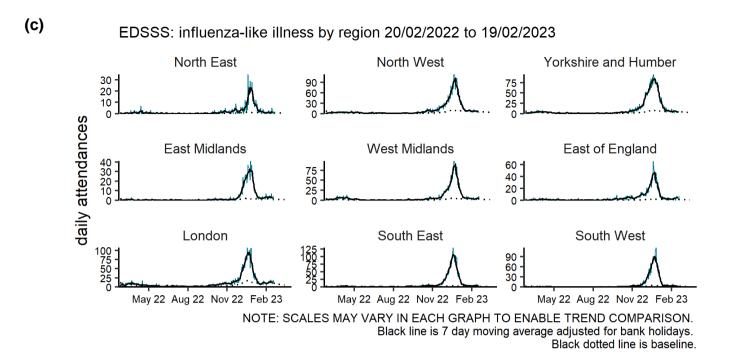
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.





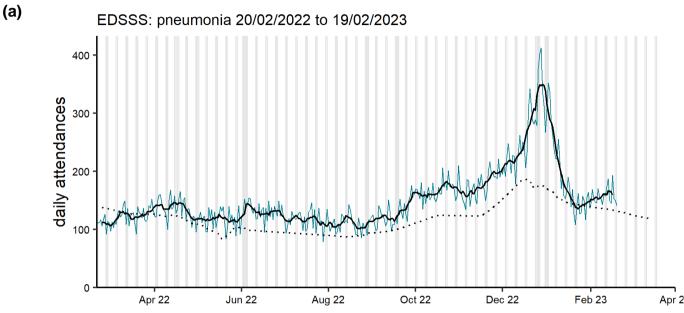
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.

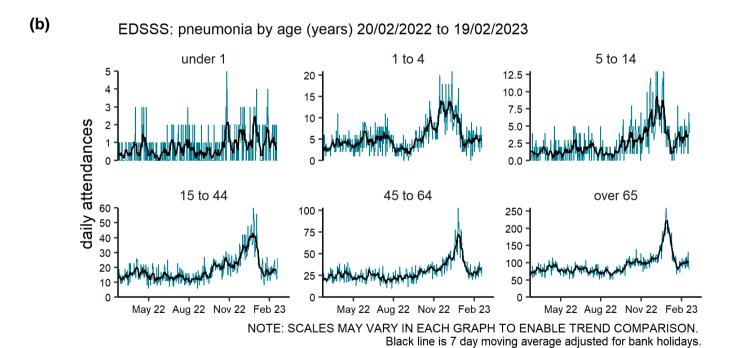
Black line is 7 day moving average adjusted for bank holidays.

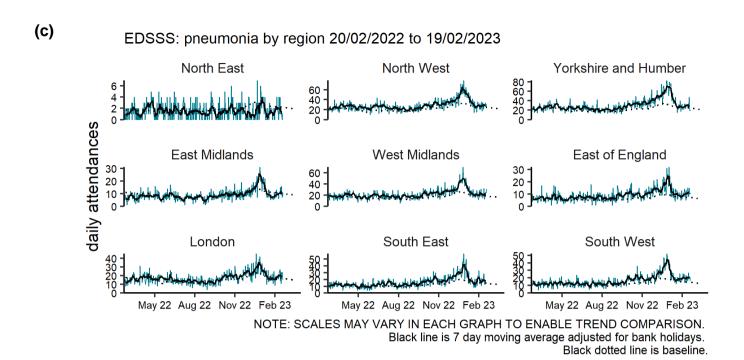


#### Pneumonia

Figure 6: Daily number of pneumonia ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

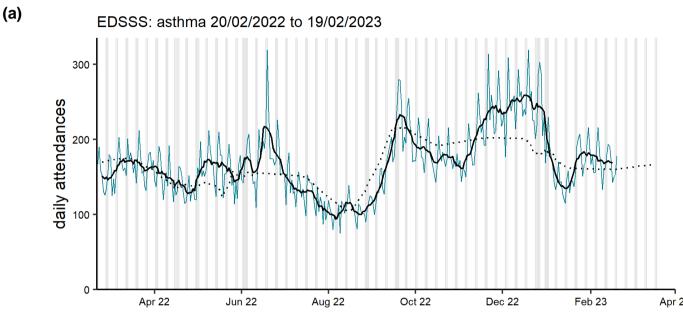


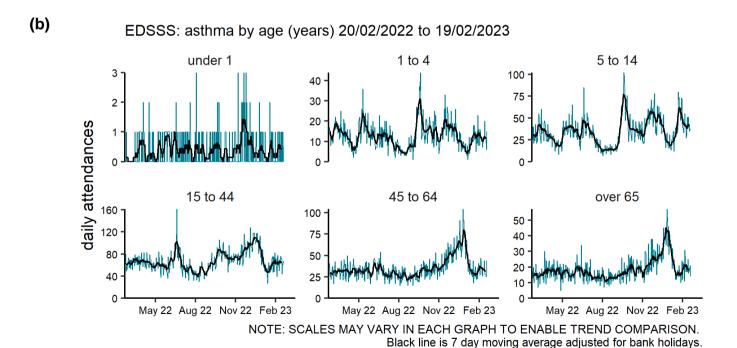


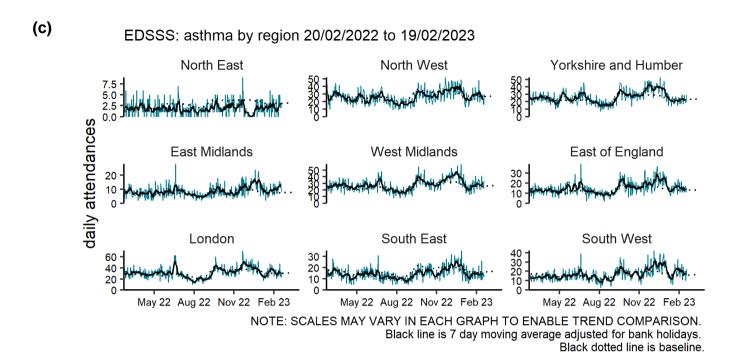


## **Asthma**

Figure 7: Daily number of asthma ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



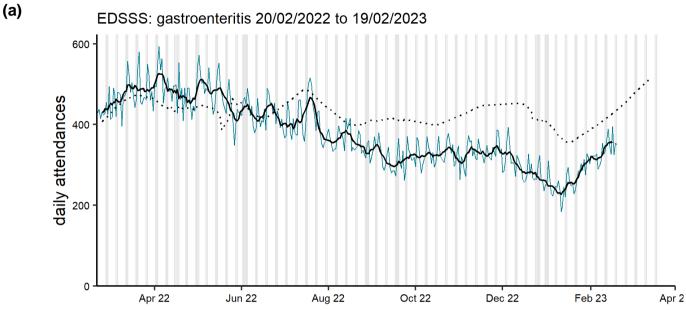


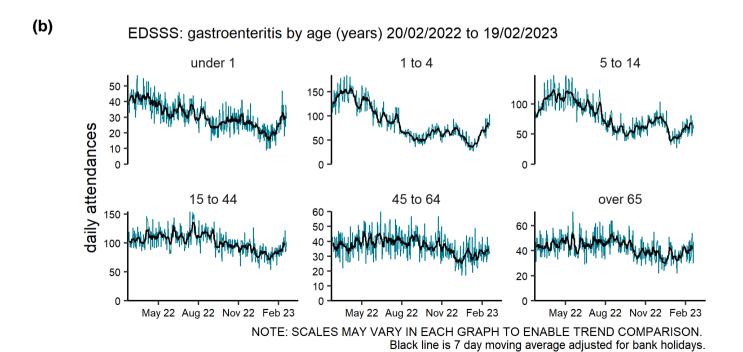


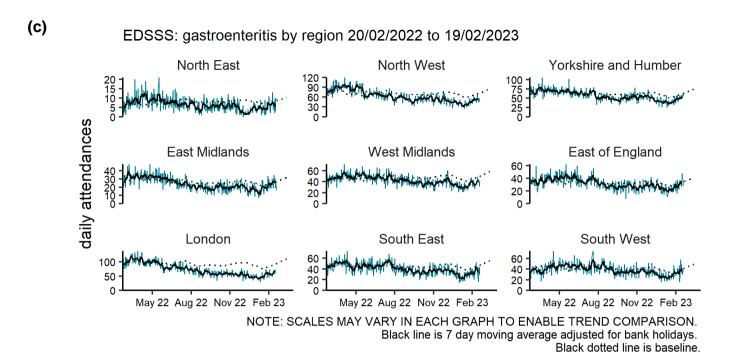
## **Gastrointestinal conditions**

#### Gastroenteritis

Figure 8: Daily number of gastroenteritis ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.







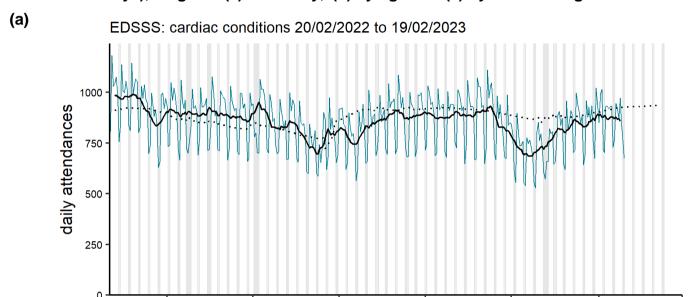
## **Cardiac conditions**

Apr 22

Jun 22

#### Cardiac

Figure 9: Daily number of cardiac ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



Aug 22

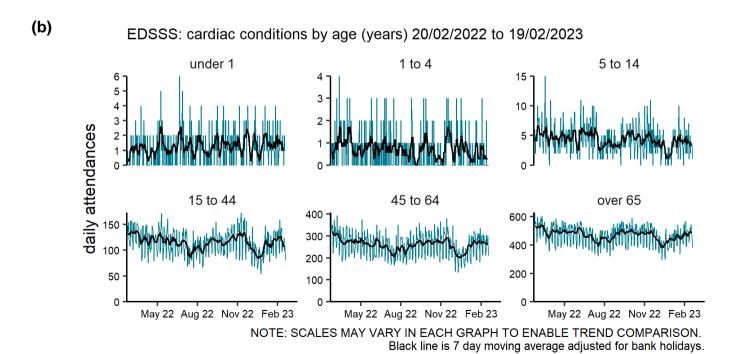
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

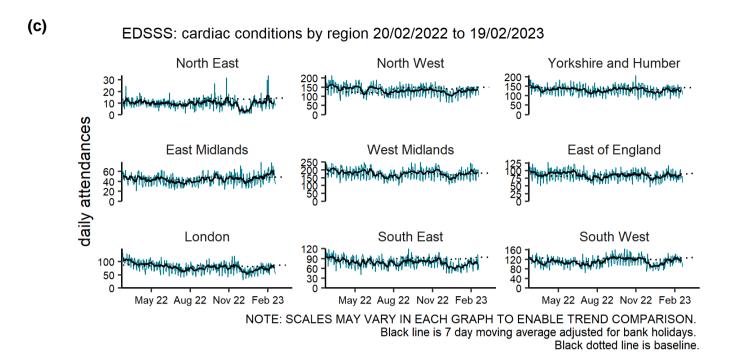
Dec 22

Feb 23

Apr 2

Oct 22

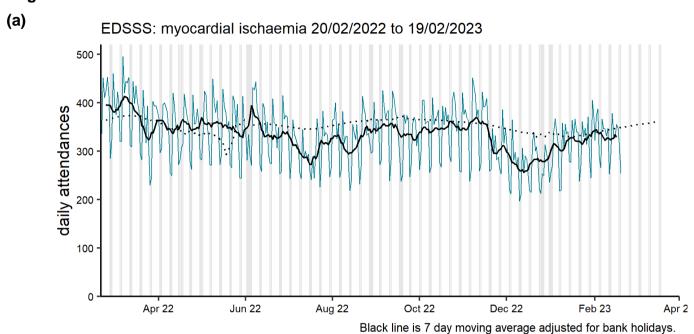




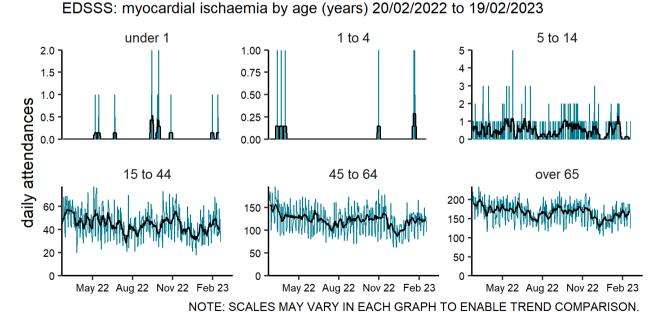
## Myocardial ischaemia

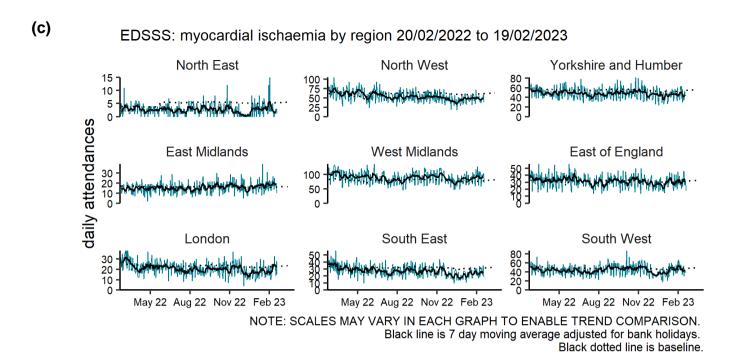
(b)

Figure 10: Daily number of myocardial ischaemia ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



Black dotted line is baseline. Grey columns show weekends and bank holidays.

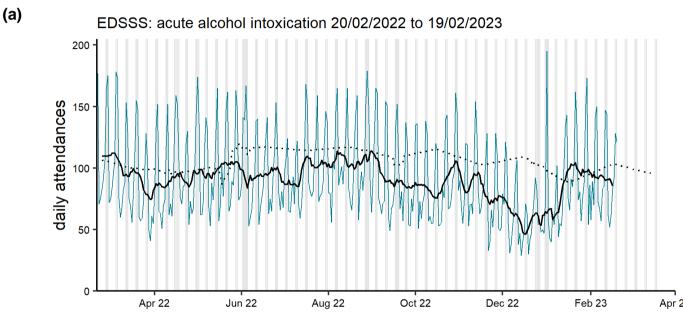


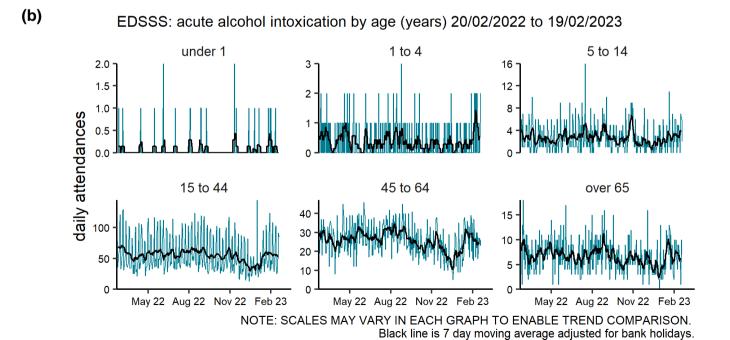


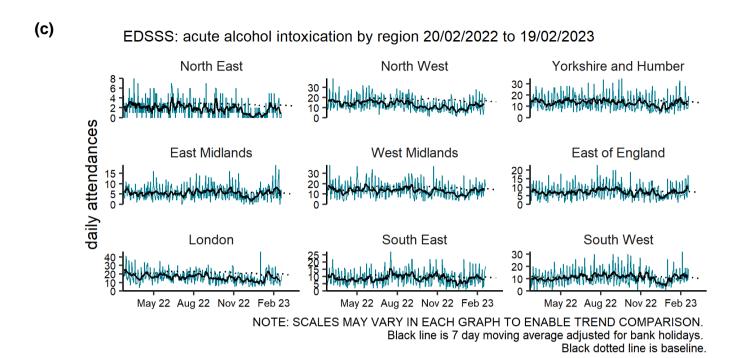
## Other conditions

#### Acute alcohol intoxication

Figure 11: Daily number of acute alcohol intoxication ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



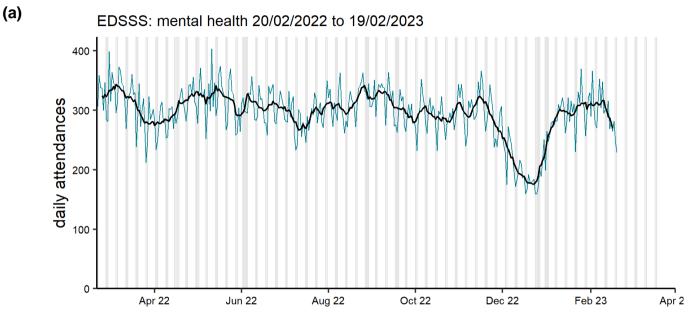




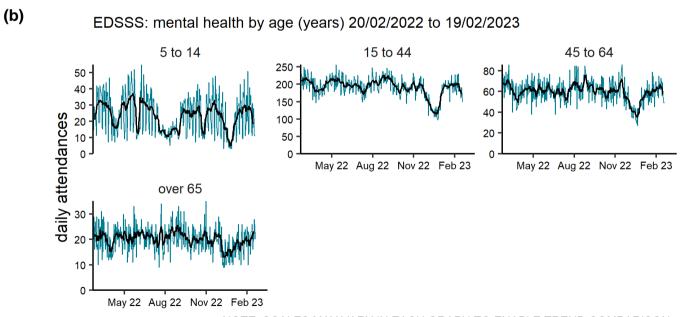
#### Mental health

## Figure 12: Daily number of mental health<sup>3</sup> ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

<sup>3</sup> mental health attendances reported here are those with a primary diagnosis in the ECDS mental health diagnosis grouping. Attendances where the primary diagnosis relates to overdose, alcohol use or self harm are not included.

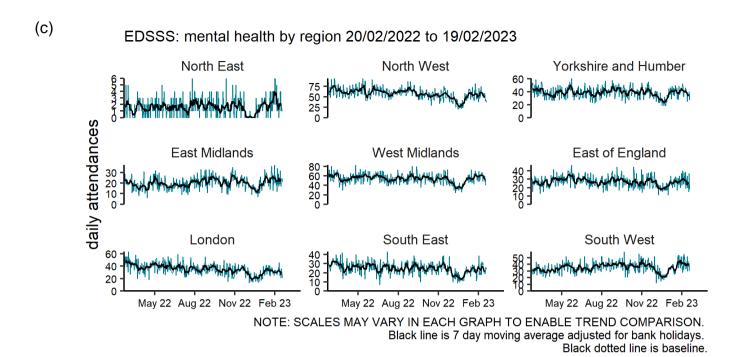


Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



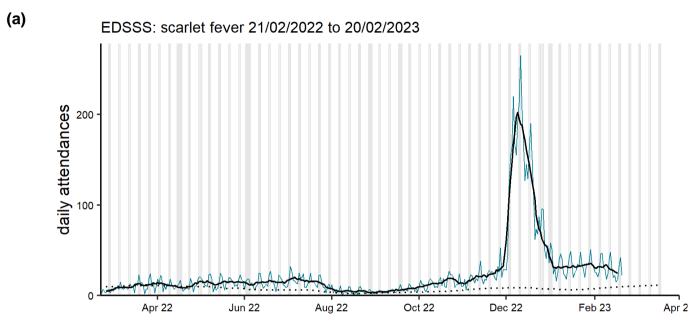
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.

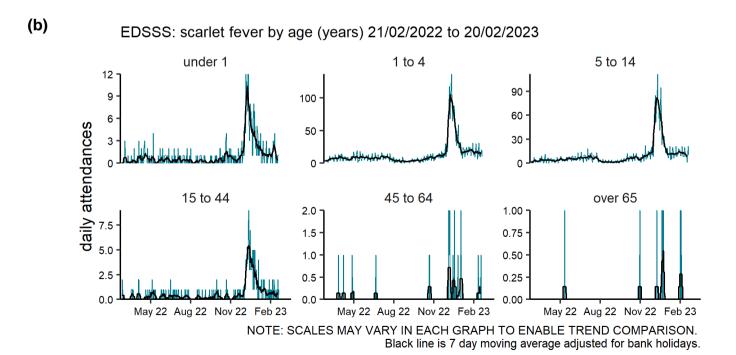
Black line is 7 day moving average adjusted for bank holidays.

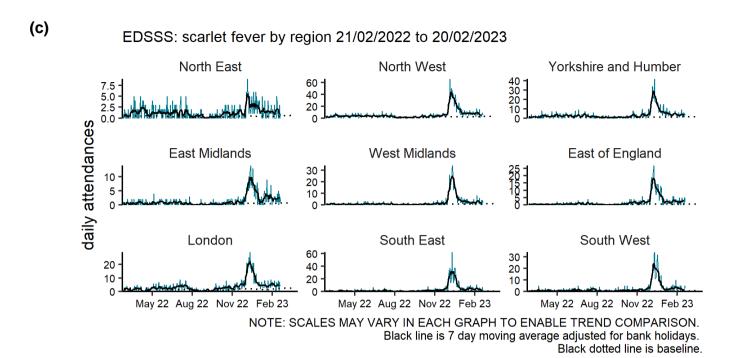


## Scarlet fever

Figure 13: Daily number of scarlet fever ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.







## Seasonal environmental conditions

During set periods of the year the Met Office operates both heat and cold weather watch systems, in association with UKHSA. Syndromic indicators are used to monitor the impact of both extreme hot and cold weather in England during these periods and will be included below (where an appropriate syndromic indicator is available).

Cold weather alert period: 1 November to 31 March

Heat-Health Alert period:1 June to 15 September

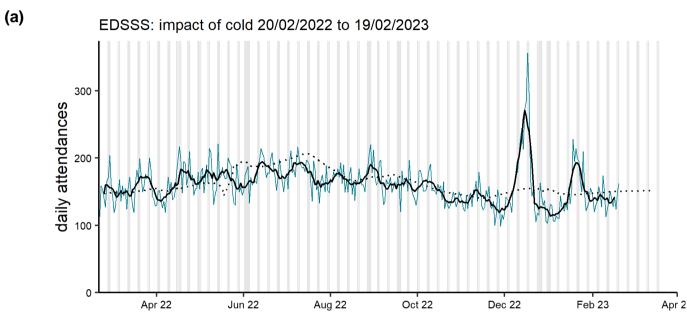
Highest weather alert level during the current reporting week:

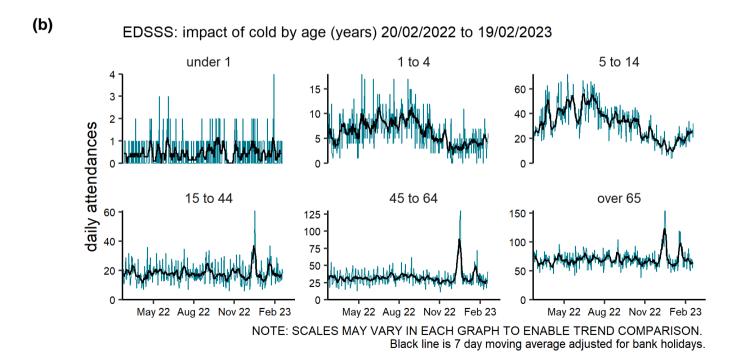
Level 2 – Alert and readiness

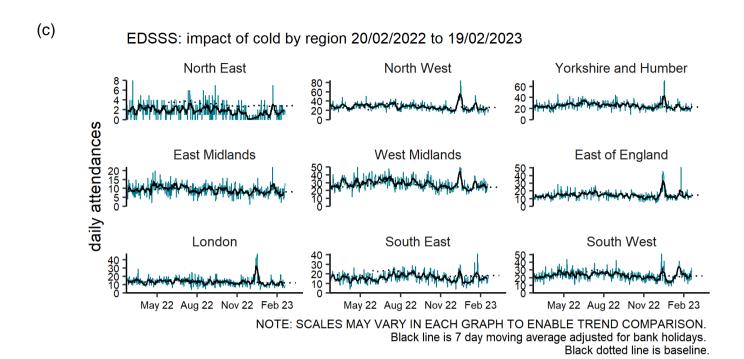
## Impact of cold

Figure 14: Daily number of impact of cold<sup>4</sup> ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

<sup>&</sup>lt;sup>4</sup> impact of cold attendances reported here are restricted to female attendances, with a primary diagnosis of fracture of the femur/wrist/forearm plus cold specific diagnoses of hypothermia, or cold injuries.







#### **Notes and caveats**

The following additional caveats apply to the UKHSA emergency department syndromic surveillance system:

- the data presented are based on a national syndromic surveillance system:
  - o should be used to monitor trends not to estimate numbers of 'cases'
  - an automated daily transfer of anonymised ED data is received from NHS Digital, from the <u>Emergency Care Data Set</u> (ECDS)
  - not all EDs currently provide data on a daily basis, EDs are eligible for inclusion in this report only where:
    - data relates to attendances at a type 01 ED
    - data for 7 of the 7 most recent days was received
    - data for those days was received within 2 calendar days of the patient arrival
  - when an ED meets these criteria, all historical data from that ED is included
  - EDs included each week is likely to change, which will affect the historical data inclusion
  - o national coverage each week is included in Table 2,
  - o the number of EDs in each region area is described in Table 3
- individual EDs will not be identified in these bulletins
- some syndromic indicators are hierarchical:
  - o acute respiratory infections includes:
    - COVID-19-like

- influenza-like illness
- acute bronchitis or bronchiolitis
- pneumonia
- other and non-specific acute respiratory infections
- o cardiac conditions includes:
  - myocardial ischaemia
  - other and non-specific cardiac conditions
- baselines:
  - o were last remodelled January 2023
  - o are constructed from historical data since April 2018
  - represent seasonally expected levels of activity
  - take account of any known substantial changes in data collection, population coverage or reporting practices:
    - the COVID-19 pandemic period is excluded, to show seasonally expected levels if COVID-19 had not occurred
  - may be remodelled to include the impacts seen during periods of the COVID-19 pandemic if/when appropriate due to introduction of large scale public health interventions which may affect ED attendance levels

## **Acknowledgements**

We are grateful to the clinicians in each ED and other staff within each Trust for their continued involvement in the EDSSS.

We thank the Royal College of Emergency Medicine, NHS Digital and NHS England for their support in the development of national EDSSS, using anonymised data collection from ECDS.

## About the UK Health Security Agency

UKHSA is responsible for protecting every member of every community from the impact of infectious diseases, chemical, biological, radiological and nuclear incidents and other health threats. We provide intellectual, scientific and operational leadership at national and local level, as well as on the global stage, to make the nation heath secure.

UKHSA is an executive agency, sponsored by the Department of Health and Social Care.

www.gov.uk/government/organisations/uk-health-security-agency

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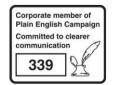
Prepared by: Real-time Syndromic Surveillance Team

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